

REMARKS

These remarks follow the order of the paragraphs of the office action. Relevant portions of the office action are shown indented and italicized.

DETAILED ACTION
Information Disclosure Statement

1. The information disclosure statement filed July 6, 2006 fails to comply with 37 CFR 197(c) because it includes a statement as specified in 37 CFR 1.97(e) specifying that each item in the information disclosure statement is submitted within three months of the date it was cited in any communication from a foreign patent office in a counterpart foreign application, yet it includes JP 11-175491 which was cited as Patent family member of EP 0908830 A in the International Search Report for PCT/IB01/00121 the International Search Report being made part of WO 02/061590 A1 published on August 8, 2002 (see attachment to office action). Furthermore it is noted that part of Form PTO-1449 is not legible, that the country information is not provided, and that it is not clear what PUPA means.

The information disclosure statement has been placed in the application file but the information referred to therein has not been considered.

In response, the applicants respectfully states that a corrected IDS Form PTO-1449 has been forwarded for this application. In the corrected form the term PUPA is removed from the number. It is noted that the term PUPA is used by the Japanese Patent office to show that a document is a Published Unexamined Patent Application. A set of these publications was included in the previous IDS transmittal. Another set of publications will be provided if this is required by the Examiner.

Claim Objections

2. Claim 11 is objected to because "step" in line 2 should be replaced with --steps--.

In response, the applicants respectfully states that claim 11 is amended to overcome the objection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 USC 112:

The specification shall contain a written description of the invention and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains or with which it is most nearly connected to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

*The following is a quotation of the second paragraph 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

4. Claims 1-10, 17-18, 21-22 are rejected under 35 U.S.C. 112, first paragraph as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains or with which it is most nearly connected to make and/or use the invention.

Claim 1 recites a buffer storing indications of interrupts" in line 2, "moving the contents of the buffer to the payload portion of the control data block, and sending the control data block to the host computer system" in lines 7-9. The recitations suggest that indications of interrupts are being transferred to the host computer system, yet claim 1 also recites said apparatus for transferring interrupts from the peripheral device to a host computer" in lines 3-4. The specification does not disclose transferring interrupts and indications of interrupts to the host computer.

In response, the applicants respectfully states that the paragraph beginning on page 4, line 12, of the specification is amended to more clearly enable the claimed invention. The specification includes an embodiment in which interrupts and indications of interrupts are transferred to the host computer. In so much that is in the claim, it is not new matter. This overcomes the rejection of Claims 1-10, 17-18, 21-22 under 35 U.S.C. 112, first paragraph, and Claims 1-10, 17-18, 21-22 are allowable.

5. Claims 11-16, 19-20 are rejected under 35 U.S.C. 112, first paragraph as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected to make and/or use the invention.

Page 40, lines 3-5 discloses "The payload portion comprises a plurality of fields each containing the identity of the LCP channel that indicated the completion event", it appears that the cited portion only supports a payload portion having a plurality of fields, each corresponding to one of the ports - rather than to a different one of the ports.

In the example of FIG. 18, there are 28 fields in the payload portion. Each field of payload portion contains the identity of the LCP channel (ports) that indicated the completion event (the interrupt) - hence a payload portion having a plurality of fields, each corresponding to one of the ports. The limitation "a plurality of fields each

1 *corresponding to a different one of the port” would require 28 different ports, and such*
2 *limitation appears not to be supported by the specification.*

3 In response, the applicants respectfully states that the paragraph beginning on page 39, line 25, of
4 the specification is amended to more clearly enable the claimed invention. The specification
5 includes an embodiment in which the payload portion has a plurality of fields, each corresponding
6 to a different one of the ports. In so much that is in the claim, it is not new matter. This
7 overcomes this rejection of Claims 11-16, 19-20 under 35 U.S.C 112, first paragraph, and Claims
8 11-16, 19-20 are allowable.

9 *Furthermore it appears that there is no support for "moving the contents of the buffer to*
10 *the corresponding fields of the payload portion" - as page 38, lines 25-26 merely*
11 *discloses "when preset conditions are met, an Interrupt Control Block (ICB) 1680 is*
12 *generated by the ISOC 120 from the information stored in the interrupt FIFO 1660".*

13 In response, the applicants respectfully states that paragraph beginning on page 4, line 12, of the
14 specification is amended to more clearly enable the claimed invention. The specification includes
15 an embodiment in which the contents of the buffer are moved to the corresponding fields of the
16 payload portion. In so much that is in the claim, it is not new matter. This overcomes this
17 rejection of Claims 11-16, 19-20 under 35 U.S.C 112, first paragraph, and Claims 11-16, 19-20
18 are allowable.

19 *6. Claims 13-15 are rejected under 35 U.S.C 112, first paragraph, as failing to comply*
20 *with the enablement requirement. The claim(s) contains subject matter which was not*
21 *described in the specification in such a way as to enable one skilled in the art to which it*
22 *pertains or with which it is most nearly connected to make and/or use the invention Claim*
23 *13 recites "at least a predetermined plurality of indications is stored in the buffer.*

24 In response, the applicants respectfully states that claim 13 reads:

25 13. A method as claimed in claim 11, wherein the step of determining if the preset
26 condition is met comprises determining if at least a predetermined plurality of indications
27 is stored in the buffer and if a predetermined period has elapsed.

28 The paragraph starting on Page 5, line 3, of the specification reads:

29 “Preferably, the preset condition comprises a determination that the buffer is full. The
30 preset condition may comprise a determination that at least a predetermined plurality of

indications is stored in the buffer and that a predetermined period has elapsed. Similarly, the preset condition may comprise a determination that at least one indication is stored in the buffer and that a predetermined period has elapsed.”

Thus claim 13 is indeed described in the specification in such a way as to enable one skilled in the art to which it pertains or with which it is most nearly connected to make and/or use the invention. This overcomes this rejection of Claim 13 under 35 U.S.C 112, first paragraph, and Claim 13 is allowable.

Claim 14 recites “at least one indication is stored in the buffer”.

In response, the applicants respectfully states that the amendment to the paragraph beginning on page 4, line 12, of the specification further provides support for claim 14. Thus claim 14 is indeed described in the specification in such a way as to enable one skilled in the art to which it pertains or with which it is most nearly connected to make and/or use the invention. This overcomes this rejection of Claim 13 under 35 U.S.C 112, first paragraph, and Claim 14 is allowable.

Claim 15 recites “a count indicative of the number of indications included in the payload portion”. The claims suggest that interrupts and indications are two different entities, while the specification only discloses only one entity being stored in the buffer and the count being indicative of only one entity.

In response, the applicants respectfully states that the paragraph beginning on page 5, line 8, of the specification further provides support for claim 15. It reads:

In some embodiments of the present invention, the control data block comprises a header portion having an identifier for identifying the ICB and a count indicative of the number of indications included in the payload portion. The header portion may also comprise a time of day stamp.

Thus claim 15 is indeed described in the specification in such a way as to enable one skilled in the art to which it pertains or with which it is most nearly connected to make and/or use the invention. This overcomes this rejection of Claim 15 under 35 U.S.C 112, first paragraph, and Claim 15 is allowable.

7. Claims 10, 22 are rejected under 35 U.S.C. 112, first paragraph as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected to make and/or use the invention. The examiner cannot find support for the limitations of the claims. In particular it is not clear what constitute the claimed apparatus, the claimed host processing system, the claimed memory of the host processing system, the claimed data processing system, the claimed host computer and the claimed memory of the host computer system. Applicant is required to specifically point out where to find the support for the limitations of the claims in the specification by page and line number - and in particular, applicant is required to map out each of the elements claimed with the teachings of the specification.

In response, the applicants respectfully states that claim 10 reads:

10. An apparatus as claimed in claim 1, further comprising:
a host processing system having a memory, a data communications interface for communicating data between the host computer system and a data communications network, forming a data processing system for controlling flow of interrupts from the data communication interface to the memory of the host computer system.

It shows that the apparatus of claim 10 includes a host processing system which has a memory, and a data communications interface, besides the elements of claim 1, namely a buffer and a controller. These elements together form a data processing system. These are described in the paragraph beginning on page 5, line 8, of the specification further provides support for claim 15. It reads with emphasis added:

In some embodiments of the present invention The present invention extends to a peripheral device comprising apparatus as herein before described, and to a data communications network interface, comprising such a peripheral device. **The present invention also extends to a data processing system comprising a host processing system having a memory, a data communications interface for communicating data between the host computer system and a data communications network, and apparatus as hereinbefore described for controlling flow of interrupts from the data communication interface to the memory of the host computer system.**

Each element performs in a manner described in the specification and/or as known to those skilled in the art. For example, the controller and buffer are described in the paragraph starting on line 4, page 2, paragraph starting on line 6, page 15, paragraph starting on line 6, page 15, and

subsequently. These comments also are applicable to claim 22. Thus claims 10 and 22 are indeed described in the specification in such a way as to enable one skilled in the art to which it pertains or with which it is most nearly connected to make and/or use the invention. This overcomes this rejection of claims 10 and 22 under 35 U.S.C 112, first paragraph, and claims 10 and 22 are allowable.

8. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention Claim 1 recites "the peripheral device having a plurality of port" in lines 2- 3.

Claim 1 also recites "a port" in line 9. It is not clear that the recited "a port" is a port of the peripheral device. Claim 1 also recites "via one of the ports" in line 12. It is not clear that the recited none of ports is a port of the peripheral device.

In response, the applicants respectfully states that claim 1 is amended to more clearly show that all the ports are ports of the peripheral device. Thus claim 1 is indeed particularly points out and distinctly claim the subject matter of the invention. This overcomes this rejection of Claim 1 under 35 U.S.C 112, first paragraph, and Claim 1 and all claims that depend thereupon are allowable.

Claim 11 recites "the peripheral device having a plurality of ports" in line 2. Claim 11 also recites "a different one of the ports" in line 7. It is not clear that the recited "a different one of the ports" is a port of the peripheral device. Claim 11 also recites "via one of the ports" in line 10. It is not clear that the recited "one of ports" is a pod of the peripheral device.

In response, the applicants respectfully states that claim 11 is amended to more clearly show that all the ports are ports of the peripheral device. Thus claim 11 particularly points out and distinctly claims the subject matter of the invention. This overcomes this rejection of Claim 11 under 35 U.S.C 112, first paragraph, and Claim 11 and all claims that depend thereupon are allowable.

Claims 8-10, 17-20,22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1 *Claim 8 recites "A peripheral device comprising the apparatus claimed in claim 1" in*
2 *line 1, and claim 9 depends on claim 8. Since claim 1 also recites "a peripheral device"*
3 *in line 2, it is not clear whether the peripheral device of claim 8 is the same as the*
4 *peripheral device of claim 1. Claim 8 needs to be amended to indicate either one*
5 *peripheral device, or two peripheral devices.*

6 In response, the applicants respectfully states that claims 8 and 9 are amended to refer to a
7 communications device. Thus claims 8 and 9 particularly point out and distinctly claim the subject
8 matter of the invention. This overcomes this rejection of claims 8 and 9 under 35 U.S.C 112, first
9 paragraph, and claims 8 and 9 and all claims that depend thereupon are allowable.

10 *Claim 10 recites "the memory of the host computer system" in lines 4-5 There is*
11 *insufficient antecedent basis for the limitation in the claim.*

12 In response, the applicants respectfully states that claim 10 is amended to provide proper
13 antecedent basis for the limitation in the claim. This overcomes this rejection of Claim 10 under
14 35 U.S.C 112, first paragraph, and Claim 10 and all claims that depend thereupon are allowable.

15 *Claim 17 recites "the functions of all the elements" in lines 4-5, There are insufficient*
16 *antecedent bases for "the functions" and "the elements" in the claim.*
17 *Furthermore it is not clear what "the functions of all the elements" means.*

18 In response, the applicants respectfully states that claim 17 is amended to provide proper
19 antecedent basis for the limitation in the claim, and to overcome the rejection of Claim 17 under
20 35 U.S.C 112, first paragraph, and Claim 17 is allowable.

21 *Claim 18 recites "the functions of all the elements" in lines 4-5, There are insufficient*
22 *antecedent bases for "the functions" and "the elements" in the claim.*
23 *Furthermore it is not clear what "the functions of all the elements" means.*

24 In response, the applicants respectfully states that claim 18 is amended to provide proper
25 antecedent basis for the limitation in the claim, and to overcome the rejection of Claim 18 under
26 35 U.S.C 112, first paragraph, and Claim 18 is allowable.

27 *Claim 19 recites "the steps and all the limitations of the steps" in lines 4-5.*

There are insufficient antecedent bases for "the steps" and 'the limitations of the steps' in the claim. Furthermore it is not clear what "the steps and all the limitations of the steps" means.

In response, the applicants respectfully states that claim 19 is amended to provide proper antecedent basis for the limitation in the claim, and to overcome the rejection of Claim 19 under 35 U.S.C 112, first paragraph, and Claim 19 is allowable.

Claim 20 recites “the steps and all the limitations of the steps” in lines. There are insufficient antecedent bases for “the steps” and “the limitations of the steps” in the claim. Furthermore it is not clear what “the steps and all the limitations of the steps” means.

In response, the applicants respectfully states that claim 20 is amended to provide proper antecedent basis for the limitation in the claim, and to overcome the rejection of Claim 20 under 35 U.S.C 112, first paragraph, and Claim 20 is allowable.

Claim 22 recites "the memory of the host computer system" in lines 4-5. There is insufficient antecedent basis for the limitation in the claim

In response, the applicants respectfully states that claim 22 is amended to provide proper antecedent basis for the limitation in the claim, and to overcome the rejection of Claim 22 under 35 U.S.C 112, first paragraph, and Claim 22 is allowable.

Thus all rejections of Claims 1-22 under 35 U.S.C 112, first paragraph, are overcome and Claims 1-22 is allowable.

Response to Arguments

10. Applicant's arguments filed August 1, 2006 have been fully considered but they are not persuasive or moot in view of the new grounds of rejections.

11. *With respect to the rejections of claims 11-16, 19-20 under 35 USC 112 first paragraph, applicant argued that the amendment to the specification to include the matter in the claims to meet the enablement requirement of USC 112 enables and supports a method with a payload portion having a plurality of fields, each corresponding to a different one of ports, and moving the contents of the buffer to the corresponding fields of the payload portion - since any matter in the claims as originally*

1 *filed is deemed to be old and proper matter, and the embodiment recited by the claims*
2 *need not meet the criteria of the example of FIG. 18.*

3 *The argument is not persuasive because applicant included essentially the same matter*
4 *in the claims but the matter was still not described in the specification in such a way as to*
5 *enable one skilled in the art to which it pertains, or with which it is most nearly*
6 *connected, to make and/or use the invention.* While the claims need not meet the criteria
7 *of the example of FIG. 18, there is nothing in the specification that shows one skilled in*
8 *the art how to practice the invention with a payload portion with a plurality of fields and*
9 *with each of the plurality of fields corresponding to a different one of ports, and further*
10 *moving the contents of the buffer to the corresponding fields of the payload portion A*
11 *specification that is ambiguous about the presence or absence of a claimed limitation*
12 *cannot be considered to teach the existence of the claimed limitation.*

13 In response, the applicants respectfully states that all matter in the claims are in the specification
14 are such that the matter is described in the specification in such a way as to enable one skilled in
15 the art to which it pertains, or with which it is most nearly connected, to make and/or use the
16 invention. Particular elements not described are implemented as known to those skilled in the art.
17 It is probably not a failure for the Examiner to understand the invention as described for lack of a
18 broader description, but may be rather because of specific understanding of particular parts of the
19 novelty of the claimed invention which are different than prior implementations. Thus, the
20 understanding may be proper noting the novelty. The invention may be implemented by one
21 skilled in art as described in the specification.

22 *12. With respect to the rejections of claims 8-9 under 35 USC 112, second paragraph,*
23 *applicant argued that the amendment to claims 8-9 overcome the rejections The*
24 *argument is not persuasive because it is still not clear whether the peripheral device in*
25 *claim 8 is the same as the peripheral device of claim 1.*

26 In response, the applicants respectfully states that claim 8 is amended herein to overcome the
27 rejection.

28 *13. With respect to claims 8-9, 17-20, it appears that attempts to keep the claims in*
29 *dependent form so far have only rendered the claims unclear The examiner suggests that*
30 *applicant considers rewriting the claims in independent form to overcome the rejections.*

In response, the applicants respectfully states that the claims are amended herein in a manner to make each dependent claim clear. If the Examiner requires, any particular claim can be made to be an independent claim.

It is anticipated that this amendment brings the application to allowance of claims 1-22.

Favorable action is respectfully solicited. In the unlikely event that any claim remains rejected, please contact the undersigned by phone in order to discuss the application.

Please charge any fee necessary to enter this paper to deposit account 50-0510.

Respectfully submitted,

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